QUICK START GUIDE

Saphyr - Ref. SPX450

Thank you for choosing **Analog Way** and the **Saphyr**. By following these simple steps, you will be able to set up and use your Multi Layer Hi-Res. Mixer Seamless Switcher based on **Analog Way**'s new Midra™ platform within minutes. Discover the **Saphyr** capabilities and intuitive interface while configuring your first show and unleash your creativity for a new experience in show and event management.

WHAT'S IN THE BOX

- 1 x **Saphyr (SPX450)**
- 1 x Power supply cord
- 1 x Ethernet cross cable (for device update)
- 1 x Remote Control Software (RCS²)*
- 1 x Set of 6 audio 5-pin screw terminals
- 1 x Front Rack Ears (the parts are stowed in the packaging foam)
- 1 x User Manual (PDF)*
- 1 x Quick Start guide*

** User manual, quick start guide and the RCS² are available on www.analogway.com*

CAUTION!

If required, front handles of the device can be dismantled, but with caution. The original screws removed must not be reintroduced to their location without handles in place. Substantial damages can occur, including risk of electric shock from the mains voltage. Only M4x12mm screws can be used. (They are supplied with the unit.)

QUICK INSTALL AND SETUP

Getting started:

You may wish to reset the unit to factory settings to get started. Go to: **Menu > Control > Reset/Erase > Default Values > Yes**

1. Select the Output resolution that matches the native resolution of your display. You will next be able to choose the output rate.
Menu > Output > Output format > 1920x1080 > Internal Ref > 60 Hz

2. Inputs can be configured automatically using the *Auto Set All* function. **Menu > Intputs > AutoSet All > Yes**
It will scan each input and detect the sync type that is plugged in. You can still do an *Autoset* or manual setup per input.

The **Saphyr** has 7 layers available called: **FRAME**, **LAYER A, B, C**, 2x **LOGOS**, and a **QUICK FRAME**. Each layer will obscure your view other layers below.

3. To display a source, select the **LAYER A** (it will begin to blink) then, select a source (it will also blink). Press **TAKE** to transition your source from Preview to Program output.

There will always be a layer selected (blinking) and a source selected (blinking) to the selected layer (blinking). To view on Preview or change the contents of a different layer, simply select it. Only 1 layer can be seen on the Preview at once.

4. To display a PIP, select the **LAYER B** (it will begin to blink) then select your source (it will also blink). Press **TAKE** to display the layer on the Program output.
To see the layer beneath, you will need to clear or move the layers that are on top.

5. To clear a layer, select the layer (it will blink) then, select **BLACK**. Press **TAKE** to remove the layer from the Program output.

TIP: If you want the Program and Preview to toggle/flipflop during each Take, enable this feature by going to **Menu > Control > Preset Toggle**.
Once enabled, the old Program output will become the new Preview after each Take.

6. To record and display a Quick Frame follow the steps on page 4.
See the next page which describes the button lighting color code and other front panel features.

Saphyr can be used to display (in Mixer Mode):
- sources seamlessly switched in the **LAYER A**. (Only 1 layer)
- **2 layers** and 2 Logos over the **LAYER A**.
- **3 layers** and 2 Logos over a Background Frame by resizing the **LAYER A**.

IMPORTANT: Simply selecting a menu item will not set it to that value. Be sure to press the ENTER button when setting the menu items.

SAPHYR - REF. SPX450 / FRONT & REAR PANELS DESCRIPTION

Front panel display:
4-line VFD

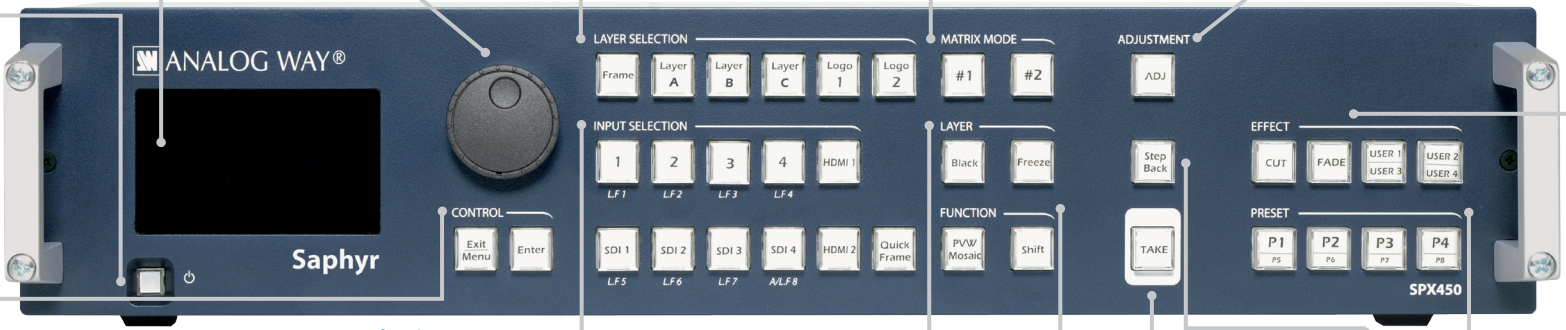
Menu scroll knob

Layer selection:
Frame: non-scaled layer
Layer A/B/C: scaled layers
Logo 1/2: display or change logo

Matrix mode:
#1 to #2: select the output #1-2, a layer and a source, then press TAKE

Adjustement:
Adjust PIP or Logo position, size active layer, zoom active layer PIP

On/Off
Stand-by: Hold for 3 seconds for stand-by mode



Control:
Exit/Menu: Home menu or back one level
Enter: validate the menu or command

Effect:
Cut: select Cut as the current transition type
Fade: select Fade as the current transition type
User 1 to 4: select as a customized transition

Input selection:
1 to 4: access source 1 to 4, display Frame/Logo 1 to 4
HDMI 1/2: access HDMI 1 or HDMI 2
SDI 1 to SDI 4: access SDI 1 to SDI 4, display Frame/Logo 5 to 8
Quick Frame: allows to quickly display a foreground Frame

Layer:
Black: clear the layer
Freeze: freeze the input linked to the current layer on Program

Function:
Mosaic Preview: display Mosaic Preview
Shift: secondary function selection button

TAKE:
Transition the pre-selected sources onto the Program output with the selected effects

Step Back:
Recall the last preset into your Preview monitor

Preset:
P1 to P8: stores and recalls 8 presets available

Power supply:
100-240 VAC 2.5A 50/60HZ / FUSE F4A 250 VAC; internal, autoswitchable; 110W

S/PDIF:
inputs #1 to #2

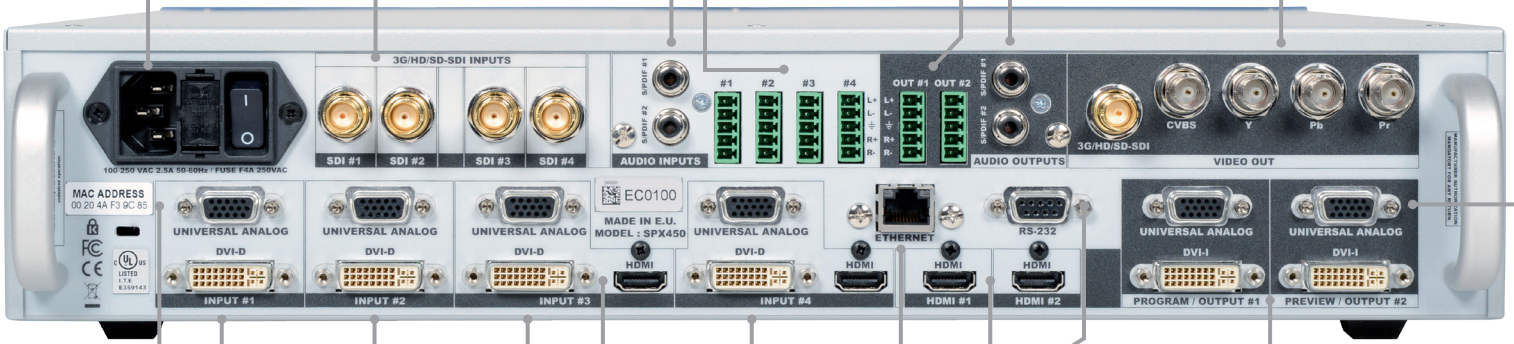
3G/HD/SD-SDI:
inputs #1 to #4

MCO male connector:
for inputs (balanced) #1 to #4

MCO male connector:
for outputs (balanced) #1 to #2

S/PDIF:
outputs #1 to #2

Video out connectors:
- 1 x BNC-F: 3G/HD/SD-SDI (with audio embedded)
- 3 x BNC-F: Y-Cb-Cr
- 1 x BNC-F: Composite video PAL/NTSC



Universal Analog Computer TV/HDTV:
outputs #1 to #2

Universal Analog Computer/TV/HDTV:
inputs #1 to #4

DVI connectors:
DVI-D inputs #1 to #4. Capability to receive digital audio signal from HDMI connector via an adaptator (HDMI-compatible)

Ethernet Plug

HDMI connectors:
HDMI inputs #3 to #6. Digital audio compliant

Communication port:
communication port with a DB9 female connector

DVI connectors:
DVI-I outputs #1 to #2. Capability to transmit digital audio signal towards a HDMI connector via an adaptator (HDMI-compatible)

CAUTION:
The user should avoid disconnecting the power source (AC input) until the unit is in stand-by mode.

OPERATION OVERVIEW

BUTTON COLOR USAGE

Solid red: #1 = Source is on the Program output
#2 = Mosaic Preview enable
#3 = Freeze enable

Solid green: #1 = Source is on Preview
#2 = Function available for modification
#3 = Current output on Matrix mode

Blinking red: Layer/source selected or is currently active on the Program output

Blinking green: Layer/source selected or is not currently active on the Program output

OUTPUT SETUP

1- Press the **EXIT/MENU** button from the Home menu (all functions must be confirmed by the **ENTER** button)
2- Select **Output**
3- Select **Output format**
4- On Format line, select the display's native resolution
5- Control or adjust your display device (Monitor or Video Projector)
6- If necessary, select **Test Pattern** in the Output menu

HOW TO USE THE MOSAIC PREVIEW FEATURE

To enable the Mosaic Preview, simply press the Mosaic Preview button (Red light solid when activated). Press again to come back to the standard Preview mode.

INPUT SETUP

1- Press the **EXIT/MENU** button from the Home menu (all functions must be confirmed by the Enter button)
2- Press **Input** and **Autoset ALL**
3- If the acquisition is successful the source appears on Preview. Please Toggle the Preview button to display the Mosaic Mode
4- If the acquisition has failed, check all connections and perform a manual setup
5- For a comprehensive Input Setup, please refer to user's Manual
6- For a manual input setup, press the **EXIT/MENU** button:
a) Press **Input**,
b) Select the right input from Input #1 up to SDI #4, then
c) Select **Active plug**,
d) Select **Type** and choose the input type.

NOTE: To adjust layer Size or Pos, use the Layer Menus. To adjust Blanking, use the Auto Centering or Blanking adjustments in the Image menu.

WORKING IN MIXER MODE

1- Select an **input**.
2- On the preview screen, the input appears
3- Select an **EFFECT** (open/close)
4- Press **TAKE** to view the result on the Program

WORKING WITH PIPS IN MIXER MODE

1- Press the **LAYER B** button. On the Preview screen, the layer appears as a color rectangle
2- Select an input. On the Preview screen, the input appears in the layer rectangle
3- Adjust the layer with **ADJUSTMENT** button (Pos & Size or Zoom)
4- Select a transition (open/close) or an effect into Layer menu [Home menu]
5- Press **TAKE** to view the result on the main screen
6- To remove layer, press **BLACK then TAKE**
7- For another layer setup, repeat from step #1

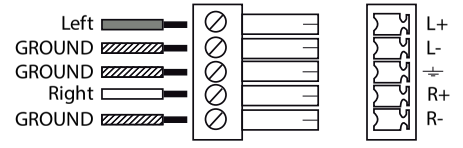
HOME MENU

- **Mode:** select to choose which mode the Saphyr will work in (Mixer/Matrix mode)
- **Output 1:** select to set the output types and resolutions of Output #1
- **Output 2:** select to set the output types and resolutions of Output #2
- **Video out:** select to configure Video output card settings
- **Input:** select to configure the 10 individual input types and resolutions
- **Preset:** select to store and use presets
- **Image:** select to change source image settings of an input
- **Keying/Titling:** select to access keying and titling controls and parameters when video layer is selected
- **Screen:** setup your background color and your Quick Frame
- **Layer:** select to adjust layer size, position, border, transparency or transitions
- **Logos/Frames:** select to store (record), use and manage logos and frames into the Saphyr
- **Audio:** select to access all audio input and output parameters
- **Control:** select to access device software information, LAN settings, reset factory settings, amongst other user oriented functions (see next page)

AUDIO INPUT/OUTPUT CONNECTIONS

MCO male connectors

Inputs #1 to #4: balanced & unbalanced connection



Inputs #1 & #2: DVI embedded audio HDMI
Inputs #3 & #4: DVI and HDMI embedded audio HDMI
Inputs SPDIF #1 and #2: digital audio inputs
Inputs HDMI #1 and #2: embedded audio HDMI
Inputs SDI #1 to #4: embedded audio SDI

Outputs #1 and #2: balanced & unbalanced connection
Outputs SPDIF #1 and #2: digital audio outputs
Output SDI: embedded SDI audio output.

HOW TO DO AN AUTOTAKE?

The Autotake function performs a TAKE automatically each time an input is selected.

HOW TO RECORD & DISPLAY A QUICK FRAME?

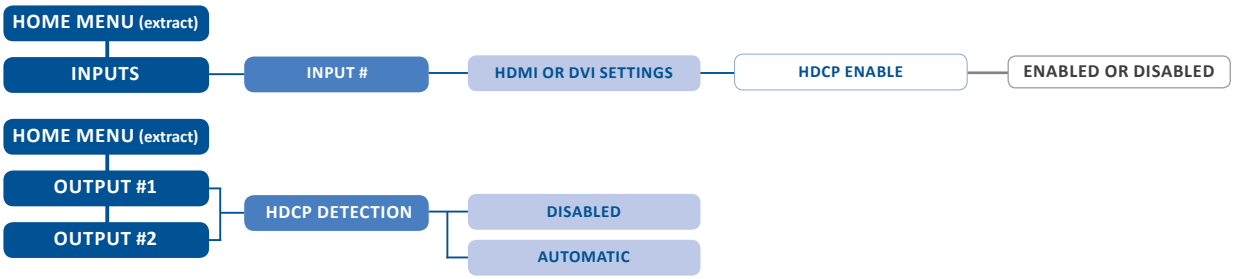
The [Empty] term appears next to all unused slots

QUICK FRAME: full and individual frame that can be displayed on top of every layer.
It is possible to store up to 8 frames in the device non volatile memory.
- Select **RECORD FRAMES** in the frames menu.
- A white rectangle will appear on your Program display, indicating the frame which will be caught and saved. (The Frame can be captured in Preview too.)
- To select the Quick frame, please go into the **SCREEN** menu, select **QUICK FRAME** menu and then choose a Frame slot. The selected frame will be your **QUICK FRAME**.

Now to display it, simply press the front panel button **QUICK FRAME**. It becomes solid RED.
- To remove the **QUICK FRAME**, press the **QUICK FRAME** button on the front panel. It becomes solid green.

TIP: a long press on the **BLACK** button will clear all layers on Preview. Press **TAKE** to view your Program display turn to black.

HOW TO DISABLE THE HDCP ENCRYPTION?



The HDCP Encryption can be disabled on HDMI/DVI inputs or/and Program Output #1 / Program Output #2. This can be useful when you have a computer which is detecting the HDCP compliance of your switcher and protecting the content by encrypting the signal from this computer. This feature will disable the HDCP compliance on this specific HDMI/DVI input only.
If you want to use HDCP content from your sources, be sure to use only HDCP compliant screens or projector. If it's not the case, the output image could be disabled.
Screen will go to black without displaying the HDCP input image, or partially layer out on HDCP content.
The output status can provide you all information about the output in real time. This feature is particularly useful when HDCP is used with long cable to be sure the communication is well handled.

HOW TO USE THE AUTO-LOCK FUNCTION?

AUTO-LOCK allows to select an input only if a signal is valid.

WARRANTY AND SERVICE

This **Analog Way** product has a 3 year warranty on parts and labor, back to factory. This warranty does not include faults resulting from user negligence, special modifications, electrical surges, abuse (drop/crush), and/or other unusual damage. In the unlikely event of a malfunction, please contact your local **Analog Way** office for service.

GOING FURTHER WITH THE SAPHYR

For complete details and operations procedures, please refer to the **Saphyr** User's Manual and our website for further information: **www.analogway.com**

Technical support:

Europe, Middle East & Africa
Tel.: +33 (0)1 81 89 08 76
techsupport@analogway.com

The Americas
Tel.: +1 212 269 1902
techsupportusa@analogway.com

Asia Pacific
Tel.: +65 6292 5800
techsupport@analogwayasia.com

10/23/2013 - SPX450-QSG
Code: 240201